

I claim:

1 1. A light waveguide comprising:

2 a first end, and

3 a second end

4 wherein one of the two ends comprises a flat entering area
5 for the light to be coupled into the core of the light
6 waveguide, the entering area is narrower than the core diameter
7 of the light waveguide, and around the entering area the end of
8 the light waveguide is laterally sloped up to the entering
9 surface.

1 2. The light waveguide according to claim 1, wherein the one
2 end of the light waveguide is only sloped on both lateral sides
3 of the entering area designed

1 3. The light waveguide according to claim 1, wherein the one
2 end of the light waveguide is sloped such that light entering
3 into the sloped surfaces is not further guided in the core of
4 the light waveguide.

1 4. The light waveguide according to claim 1, wherein the one
2 end of the light waveguide is symmetric with respect to an axial
3 plane of the light waveguide.

1 5. The light waveguide according to claim 1, wherein the
2 entering surface is narrower than the core diameter of the light
3 waveguide and wherein around the entering area a vapor deposited
4 opaque metal layer is provided.

1 6. The light waveguide according to claim 1, wherein the
2 entering area is at least as long as the core diameter of the
3 light waveguide.

1 7. The light waveguide according to claim 1, wherein the one
2 end of the light waveguide is only sloped on both lateral sides
3 of the entering area designed rectangularly, the one end of the
4 light waveguide is sloped such that light entering into the
5 sloped surfaces is not further guided in the core of the light
6 waveguide, the one end of the light waveguide is symmetric with
7 respect to an axial plane of the light waveguide, and the
8 entering area is at least as long as the core diameter of the
9 light waveguide.

1 8. A light waveguide comprising:

2 an entering surface, and

3 an existing surface,

4 wherein the entering surface is narrower than the core
5 diameter of the light waveguide, and around the entering area a
6 vapor deposited opaque metal layer is provided.

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2 9. The light waveguide according to claim 8, wherein the
3 entering area is at least as long as the core diameter of the
4 light waveguide.

1 10. An optical spectrometer comprising:

2 an exit slit, and

3 a detector for the light penetrating through the exit slit,

4 wherein the exit slit is formed by the end of the light
5 waveguide, and the detector is disposed at the other end of said
6 light waveguide.

1 11. The optical spectrometer according to claim 10, wherein the
2 end of the light waveguide is only sloped on both lateral sides
3 of the entering area designed rectangularly.

1 12. The optical spectrometer according to claim 10, wherein the
2 end of the light waveguide is sloped such that light entering
3 into the sloped surfaces is not further guided in the core of
4 the light waveguide.

1 13. The optical spectrometer according to claim 10, wherein the
2 end of the light waveguide is symmetric with respect to an axial
3 plane of the light waveguide.

1 14. The optical spectrometer according to claim 10, wherein the
2 entering surface is narrower than the core diameter of the light
3 waveguide, and around the entering area a vapor deposited opaque
4 metal layer is provided.

1 15. The optical spectrometer according to claim 10, wherein the
2 entering area is at least as long as the core diameter of the
3 light waveguide.

1 16. The optical spectrometer according to claim 10, wherein the
2 end of the light waveguide is only sloped on both lateral sides
3 of the entering area designed rectangularly, the end of the
4 light waveguide is sloped such that light entering into the
5 sloped surfaces is not further guided in the core of the light
6 waveguide, the end of the light waveguide is symmetric with
7 respect to an axial plane of the light waveguide, and the
8 entering area is at least as long as the core diameter of the
9 light waveguide.